

# DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER) BOARD AND CODE ADMINISTRATION DIVISION NOTICE OF ACCEPTANCE (NOA)

11805 SW 26 Street, Room 208 Miami, Florida 33175-2474 T (786) 315-2590 F (786) 315-2599

PRODUCT CONTROL SECTION

www.miamidade.gov/economy

**MIAMI-DADE COUNTY** 

### PCI Industries Inc d/b/a Pottorff 5101 Blue Mound Road Fort Worth, TX 76106

**SCOPE:** This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER-Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code. This product is approved as described herein, and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

### DESCRIPTION: Model EXA-645-MD Aluminum Louver

**APPROVAL DOCUMENT:** Drawing No. **EXA-645-MD NOA**, titled "EXA-645-MD", sheets 1 through 13 of 13, dated 05/03/2016, with revision 1 dated 07/27/2016, prepared by the manufacturer, signed and sealed by Theodore Berman, P.E., bearing the Miami-Dade County Product Control approval stamp with the Notice of Acceptance number and approval date by the Miami-Dade County Product Control Section.

### MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

**LABELING:** Each unit shall bear a permanent label with the manufacturer's name or logo, city, state, model/series, and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

**LIMITATION:** This louver has not been evaluated for compliance with the impact testing standard ANSI/AMCA 540.

**RENEWAL** of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

**TERMINATION** of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

**ADVERTISEMENT:** The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

**INSPECTION:** A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official. This NOA consists of this page 1 and evidence page E-1, as well as approval document mentioned above. The submitted documentation was reviewed by **Carlos M. Utrera, P.E.** 

MIAMI-DADE COUNTY
APPROVED

Aftraio 10/12/2016

NOA No. 16-0824.04 Expiration Date: October 20, 2021 Approval Date: October 20, 2016 Page 1

## NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

### A. DRAWINGS

1. Drawing No. **EXA-645-MD NOA**, titled "EXA-645-MD", sheets 1 through 13 of 13, dated 05/03/2016, with revision 1 dated 07/27/2016, prepared by the manufacturer, signed and sealed by Theodore Berman, P.E.

### B. TESTS

- 1. Test reports on 1) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94
  - 2) Large Missile Impact Test per FBC, TAS 201-94
  - 3) Cyclic Wind Pressure Loading per FBC, TAS 203-94

along with installation diagram of Model EXA-645-MD Aluminum Louvers, prepared by Intertek/ATI, Test Report No. **F9510.01-801-18**, dated 07/11/2016, signed and sealed by Tyler Westerling, P.E.

### C. CALCULATIONS

1. Structural and anchor calculations prepared by PCI Industries Inc d/b/a Pottorff, dated 07/26/2016, signed and sealed by Theodore Berman, P.E.

### D. QUALITY ASSURANCE

1. Miami-Dade Department of Regulatory and Economic Resources (RER)

### E. MATERIAL CERTIFICATIONS

1. None.

### F. STATEMENTS

- 1. Statement letter of code conformance to the 5<sup>th</sup> edition (2014) FBC issued by Ted Berman and Associates, LLC, dated 08/17/2016, signed and sealed by Theodore Berman, P.E.
- 2. Statement letter of no financial interest issued by Ted Berman and Associates, LLC, dated 08/17/2016, signed and sealed by Theodore Berman, P.E.

Carlos M. Utrera, P.E. Product Control Examiner

NOA No. 16-0824.04

Expiration Date: October 20, 2021 Approval Date: October 20, 2016

### NOTES:

- 1. THIS NOA DRAWING INCLUDES INSTALLATION DETAILS TO ATTAIN MAXIMUM DESIGN PRESSURES OF 120 PSF AS TESTED IN ACCORDANCE WITH PROTOCOLS TAS 201, TAS 202, TAS 203, & AMCA 540 FOR USE WITHIN HIGH VELOCITY HURRICANE-AFFECTED ZONES DEFINED BY THE FLORIDA BUILDING CODE.
- 2. ALL VARIATIONS ARE LARGE MISSILE IMPACT RESISTANT.
- 3. UNITS OF MEASURE ARE FRACTIONAL INCHES UNLESS OTHERWISE SPECIFIED.
- 4. IT IS ASSUMED THAT THE LOUVER SYSTEMS DO NOT SUPPORT ANY LOADS TRANSFERRED FROM THE BUILDING CONDITION.
- 5. IT IS ASSUMED THAT THE BUILDING CONDITIONS ARE ADEQUATELY DESIGNED TO SUPPORT LOADS IMPARTED BY THE LOUVER SYSTEM.
- 6. TO PREVENT GALVANIC CORROSION, ELECTROCHEMICALLY DISSIMILAR MATERIALS IN CONTACT WITH ONE ANOTHER SHALL BE PROTECTED BY PAINT, GASKETING, OR OTHER MEANS PER THE FLORIDA BUILDING CODE
- 7. THIS LOUVER IS TO BE INSTALLED IN A LOCATION WHERE THE ROOM BEHIND THE LOUVER IS DESIGNED TO DRAIN WATER PENETRATION INTO THE ROOM, AND THE ROOM WILL HOUSE WATER RESISTANT / WATER PROOF EQUIPMENT, COMPONENTS, OR SUPPLIES.
- 8. OTHER BUILDING CONDITIONS THAN THOSE DENOTED CAN BE UTILIZED IF ANALYZED AND APPROVED BY A PROFESSIONAL ENGINEER.
- 9. MULTI-SECTION WIDE AND HIGH LOUVER SYSTEMS ARE ALLOWABLE PROVIDED THE INDIVIDUAL SECTIONS ARE SUPPORTED PER THE DETAILS ON THIS DRAWING AND A SUITABLE SUPPORT STRUCTURE IS ANALYZED AND APPROVED BY A PROFESSIONAL ENGINEER.

	TABLE	3			
ANCHOR SCHEDULE					
SUBSTRATE	ANCHOR TYPE	MIN. EMBEDMENT	MIN. EDGE DISTANCE	MIN. SPACING	
CONCRETE (f'c = 2500 PSI MIN.)	1/2" X 5" HILTI KWIK BOLT TZ EXPANSION ANCHOR (F-5)	3-1/4"	2-1/8"*	10''	
GROUT-FILLED CMU (f'm = 1500 PSI MIN.)	1/2" X 5-1/2" HILTI KWIK HUS-EZ SCREW ANCHOR (F-6)	4-1/4"	4"	10"	
STRUCTURAL STEEL (MIN. 3/16" THICK, Fy = 36 KSI MIN.)	1/4"-20 X 1-1/4" HEX BOLT, NUT, AND TWO (2) FLAT WASHERS (F-8)	FULL	1/2"	1-1/2"	
STEEL STUD (MIN. 16- GA, Fy = 50 KSI MIN.)	1/4"-20 X 1-1/4" HEX BOLT, NUT, AND TWO (2) FLAT WASHERS (F-8)	FULL	1/2"	1-1/2"	
WOOD (S.G. = 0.43 MIN.)	3/8" X 3-1/2" LAG BOLT WITH FLAT WASHER (F-7)	3"	1-1/2"	1-1/2"	

TABLE 1 SINGLE SECTION SIZE LIMITATIONS MAX (W X H) MIN (W X H) MAX DESIGN PRESSURE 60 X 120 12 X 12 120 PSF TABLE 2 MULTIPLE SECTION SIZE LIMITATIONS (MAX DESIGN PRESSURE: 120 PSF) SEE SHEETS 4 THRU 8 SINGLE SECTION HIGH - UNLIMITED WIDTH SEE SHEET 9 SINGLE SECTION WIDE - UNLIMITED HEIGHT DETAIL NUMBER OR SECTION LETTER TITLE FROM PAGE(S) **SCALE** DRAWING NO. WHERE SHOWN SECTION LETTER DETAIL NUMBER -PAGE FOUND ON P.E. STAMP Ted Berman and Associates, LLC Certificate of Authorization #27502 925 Arthur Godfrey Rd. Suite 104 Miami Beach, FL 33140 No 09814 Approved as complying with the Plorida Bailding Code
Date 10 | 20 | 20 | 16
NOA# 16-0824.04

\*3-3/8" FOR ANCHORS AT MULLIONS WHEN INSTALLED WITH SHEAR-TYPE CONNECTION (SHEET 4)

UNLESS OTHERWISE SPECIFIED DIMENSION ARE IN INCHES.

TOLERANCE UNLESS NOTED: ±0.030 X.X ±0.015 XX.X XXXX.X  $\pm 0.010$ **ANGLE** ±1° FRACTION ±1/16

MAX HOLE BREAKOUT: 15% OF MATERIAL THICKNESS

5101 Blue Mound Road Fort Worth, Texas 76106 Phone: 817-509-2300 Fax: 817-831-3110

THIRD ANGLE PROJECTION

**POTTORFF** 

PCI INDUSTRIES DOING BUSINESS AS

DRAWING DESCR: COVER SHEET

PROJECT: EXA-645-MD

LOCATION:

CUSTOMER:

SHEET: 1 of 13

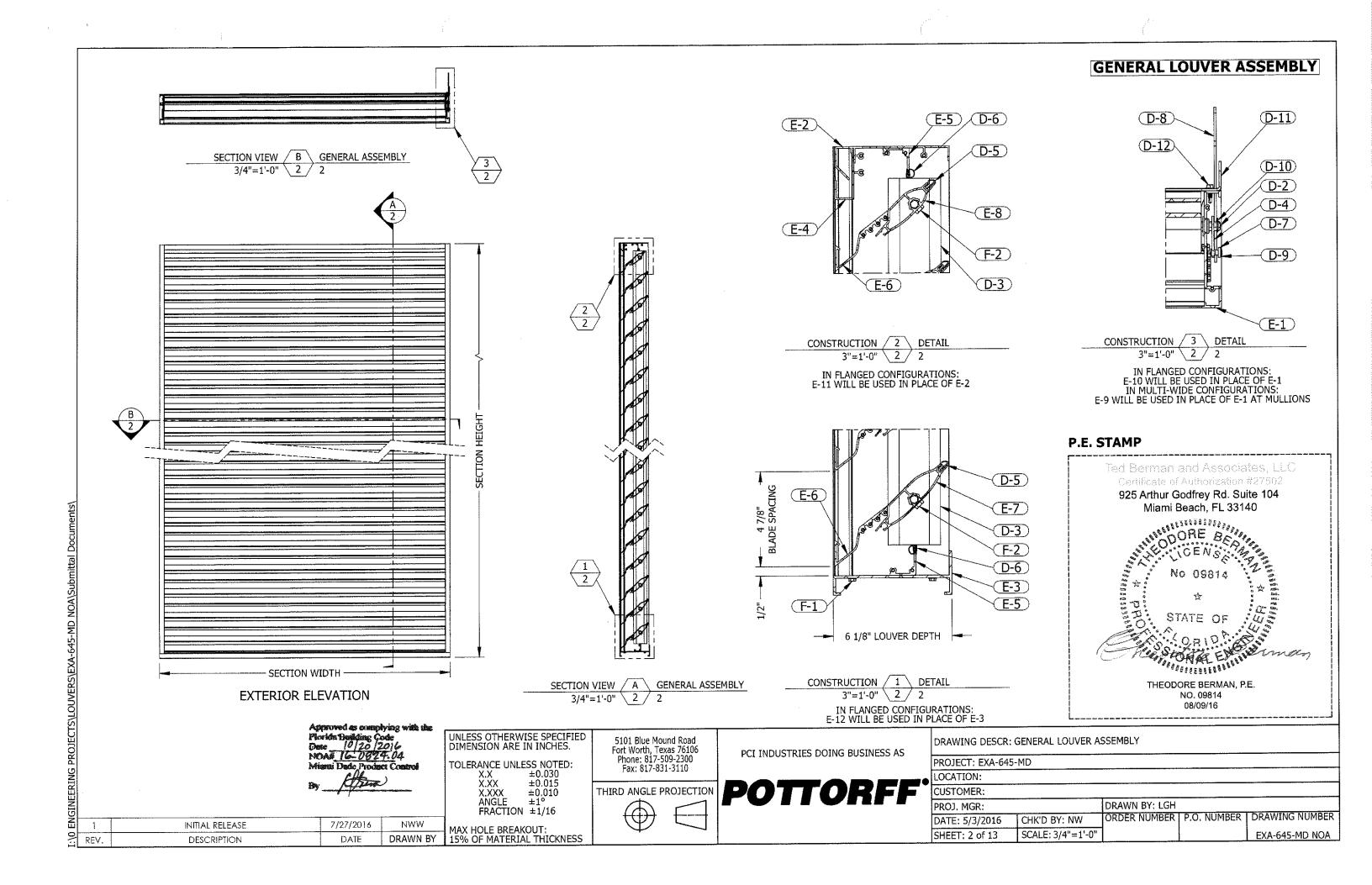
PROJ. MGR: DRAWN BY: LGH CHK'D BY: NW DATE: 5/3/2016

SCALE: NONE

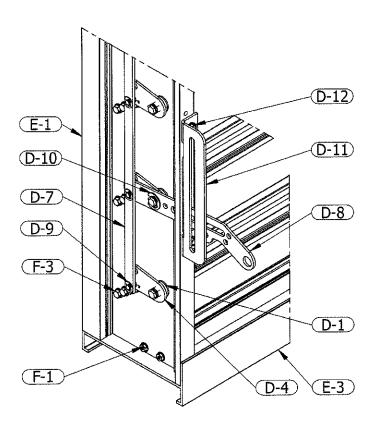
ORDER NUMBER | P.O. NUMBER | DRAWING NUMBER EXA-645-MD NOA

NO. 09814

7/27/2016 NWW INITIAL RELEASE DRAWN BY DATE DESCRIPTION REV



# $\left\langle \begin{array}{c} 5 \\ 3 \end{array} \right\rangle$ 4 INTERIOR ELEVATION



CONSTRUCTION 4 DETAIL 3"=1'-0" 3 3

IN FLANGED CONFIGURATIONS: E-10 WILL BE USED IN PLACE OF E-1 E-12 WILL BE USED IN PLACE OF E-3 IN MULTI-WIDE CONFIGURATIONS: E-9 WILL BE USED IN PLACE OF E-1 AT MULLIONS

ENGRAVED LABEL DETAIL

PCI Industries Inc d/b/a **POTTORFF** Ft Worth TX SO# 123456

Miami Dade County **Product Control** Approved

UNLESS OTHERWISE SPECIFIED DIMENSION ARE IN INCHES.

TOLERANCE UNLESS NOTED: X.X ±0.030 X.XX ±0.015

±0.010 ±1° X.XXX ANGLE ±1° FRACTION ±1/16

MAX HOLE BREAKOUT: 15% OF MATERIAL THICKNESS 5101 Blue Mound Road Fort Worth, Texas 76106 Phone: 817-509-2300 Fax: 817-831-3110

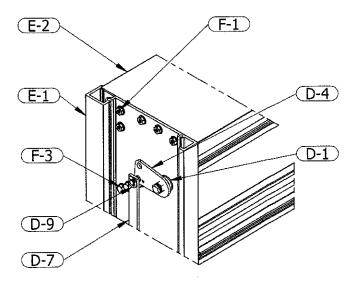
THIRD ANGLE PROJECTION



PCI INDUSTRIES DOING BUSINESS AS

# POTTORFF

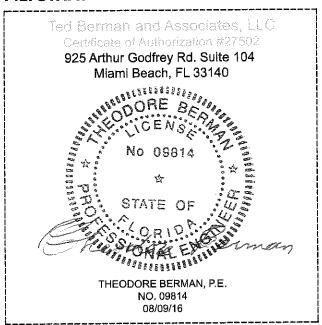
# **GENERAL LOUVER ASSEMBLY**



CONSTRUCTION 5 DETAIL 3"=1'-0" 3 3

IN FLANGED CONFIGURATIONS: E-10 WILL BE USED IN PLACE OF E-1 E-11 WILL BE USED IN PLACE OF E-2 IN MULTI-WIDE CONFIGURATIONS: E-9 WILL BE USED IN PLACE OF E-1 AT MULLIONS

### P.E. STAMP



EXA-645-MD NOA

DRAWING DESCR: GENERAL LOUVER ASSEMBLY PROJECT: EXA-645-MD LOCATION: CUSTOMER:

PROJ. MGR: DRAWN BY: LGH ORDER NUMBER | P.O. NUMBER | DRAWING NUMBER DATE: 5/3/2016 CHK'D BY: NW SCALE: 3/4"=1'-0" SHEET: 3 of 13

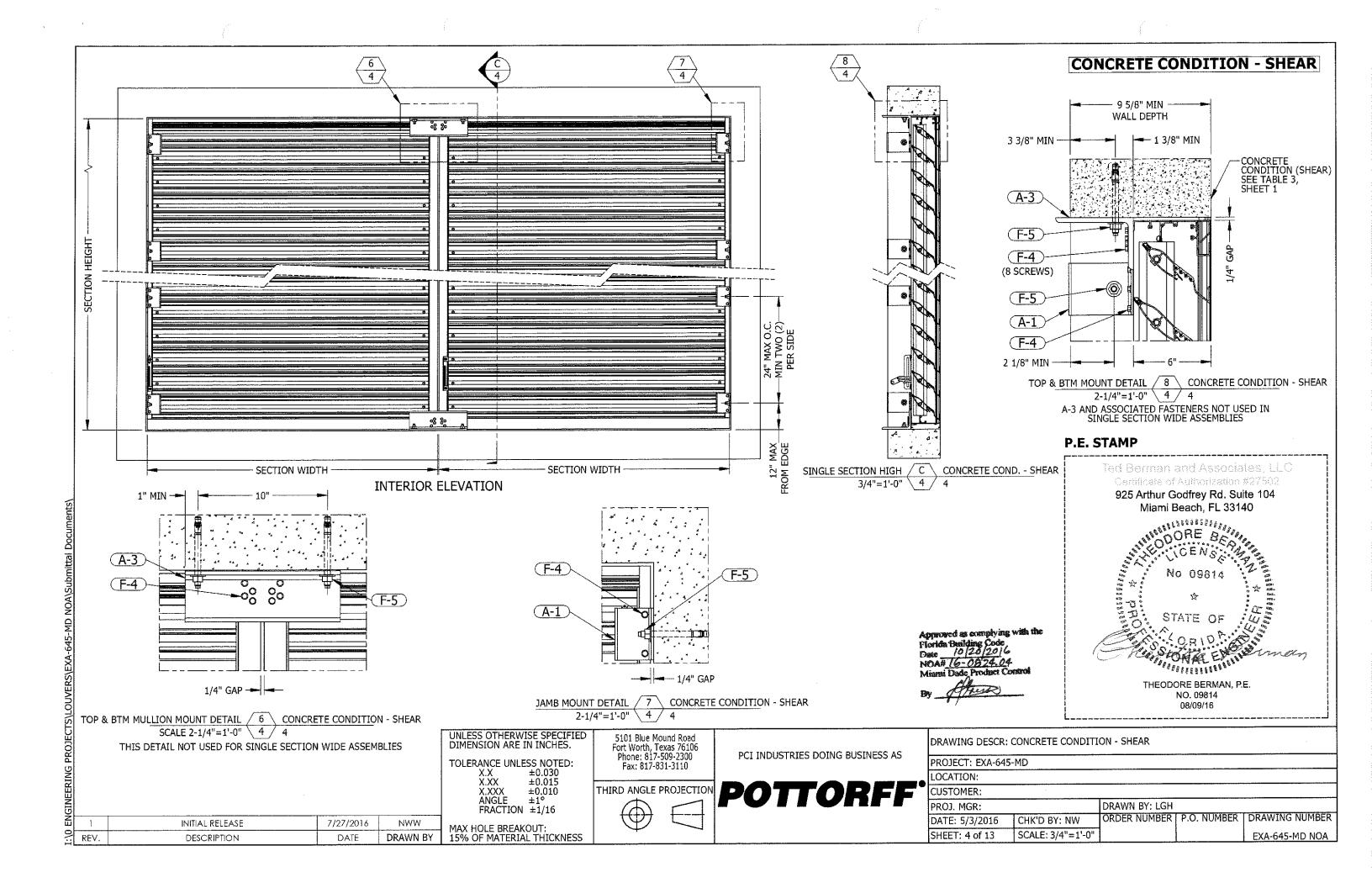
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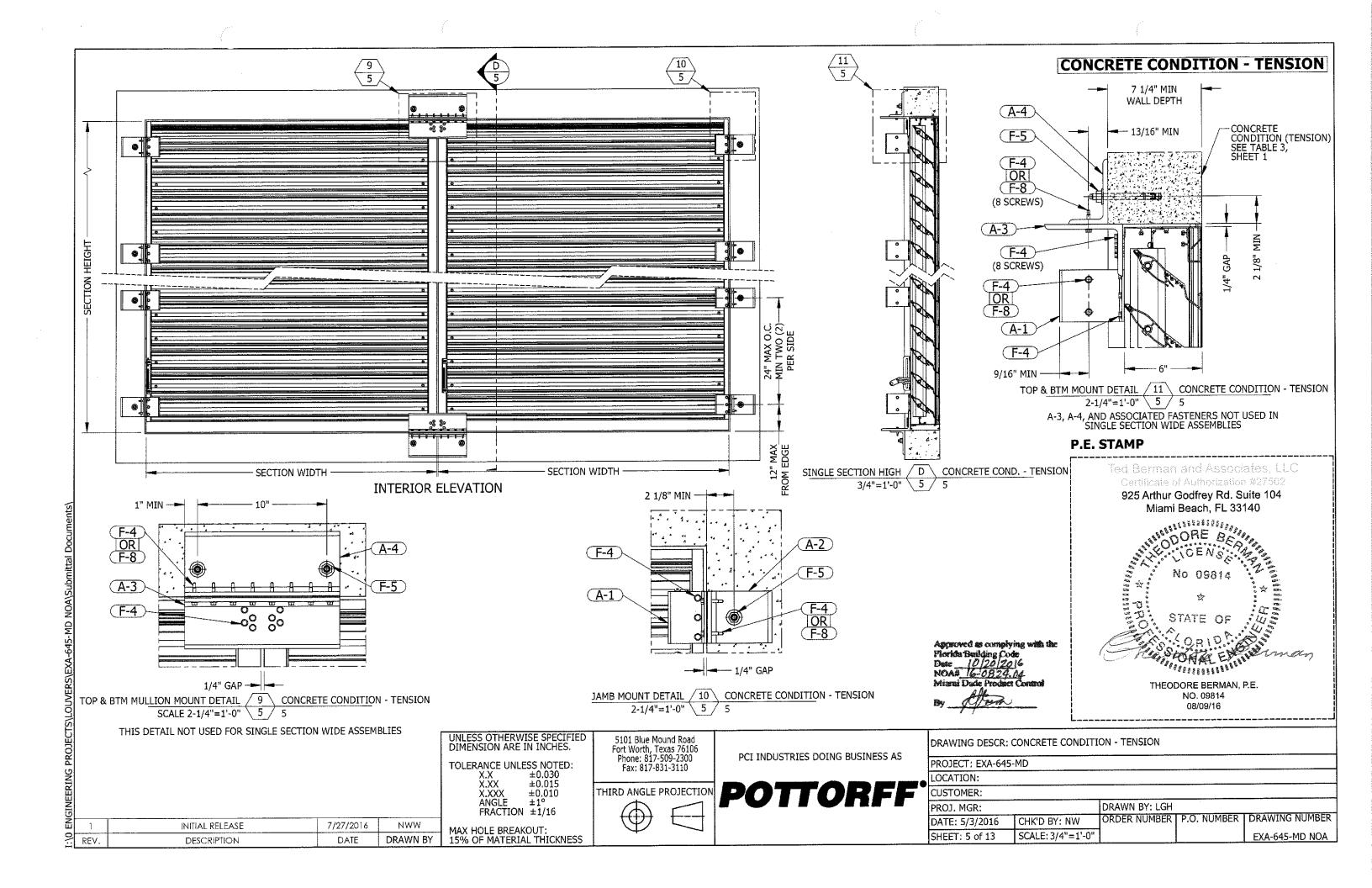
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NOA# 16-0824-04

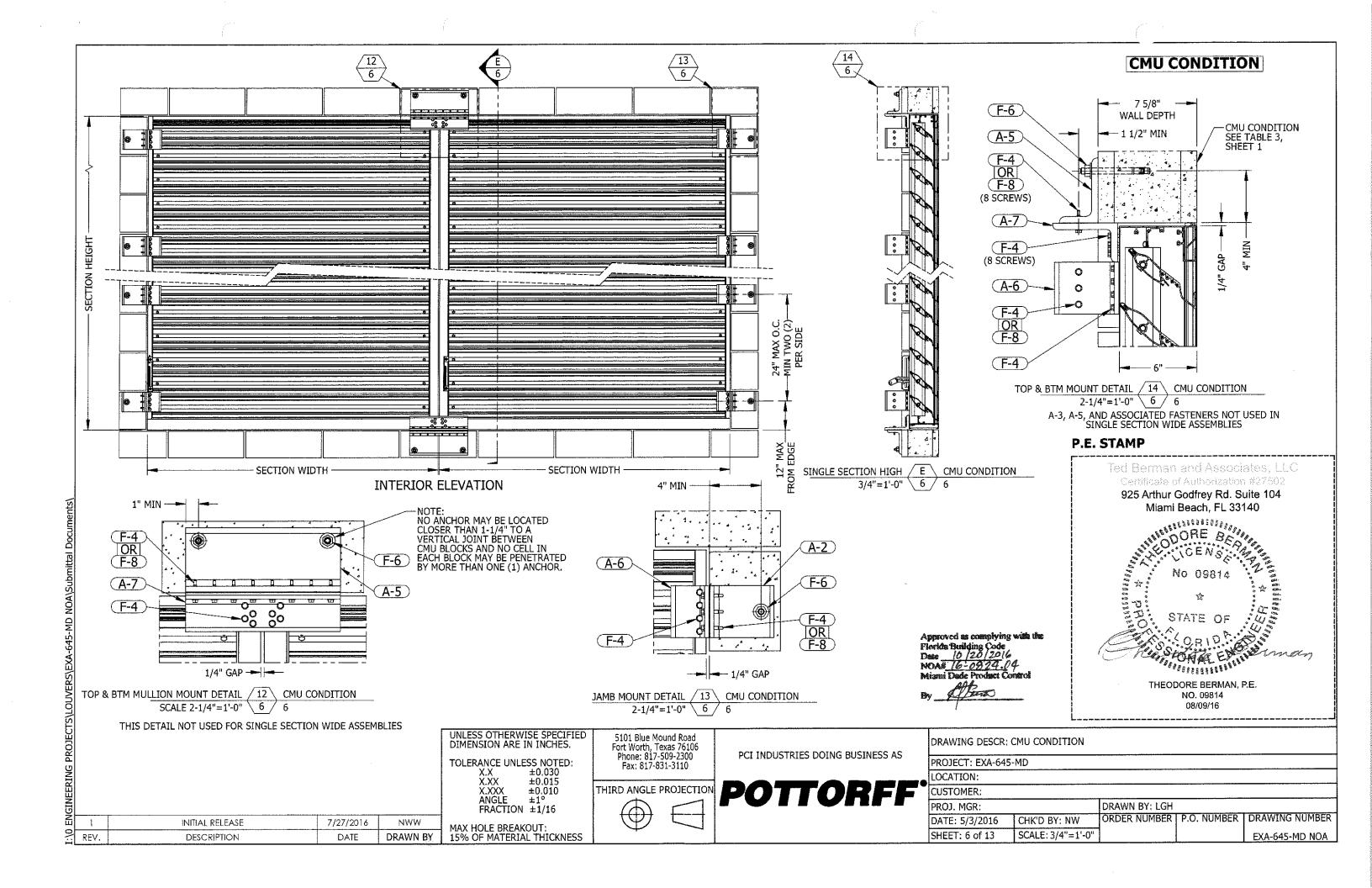
Missai Dade Product Cons

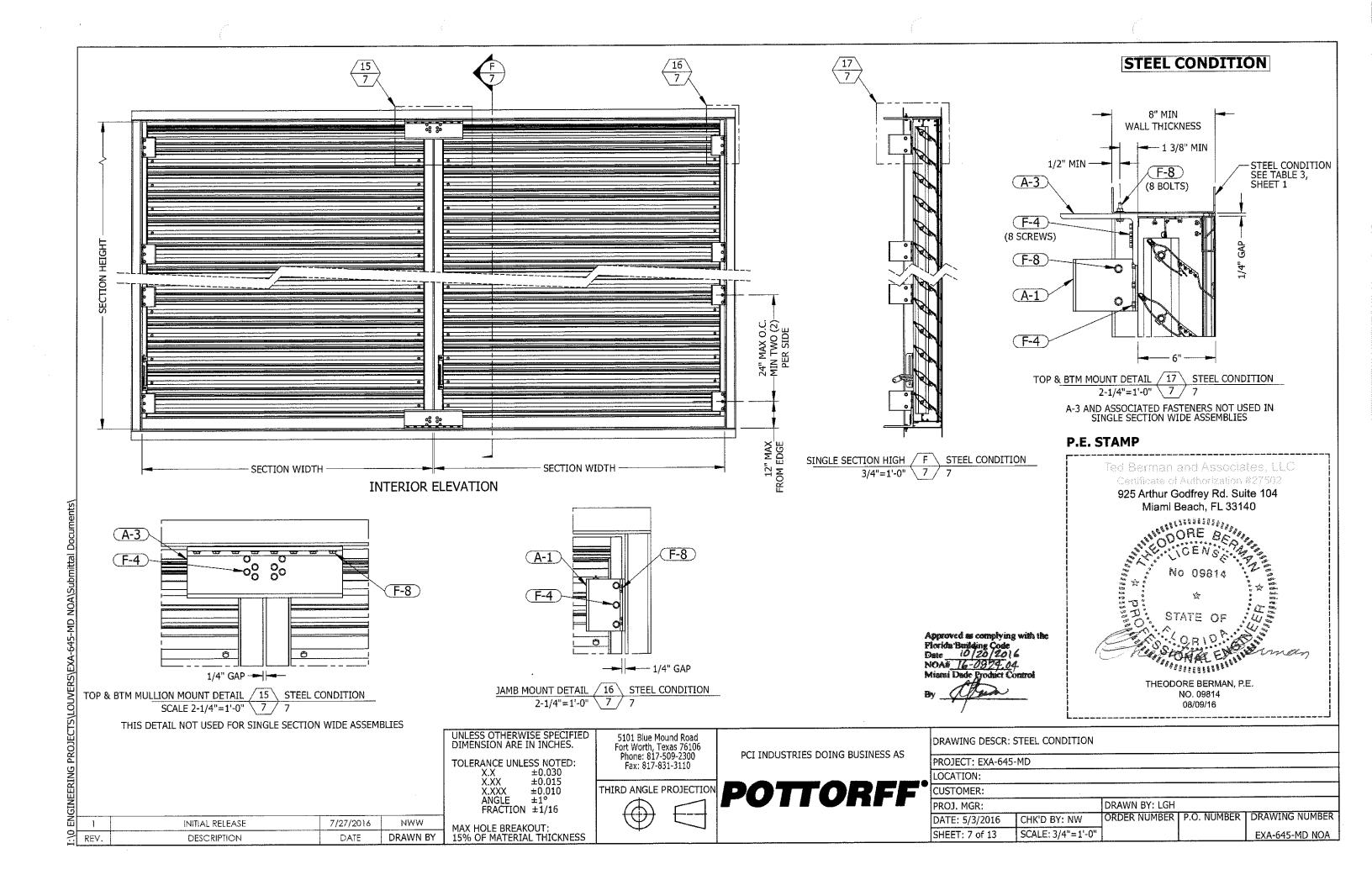
7/27/2016 NWW INITIAL RELEASE DATE DRAWN BY DESCRIPTION REV.

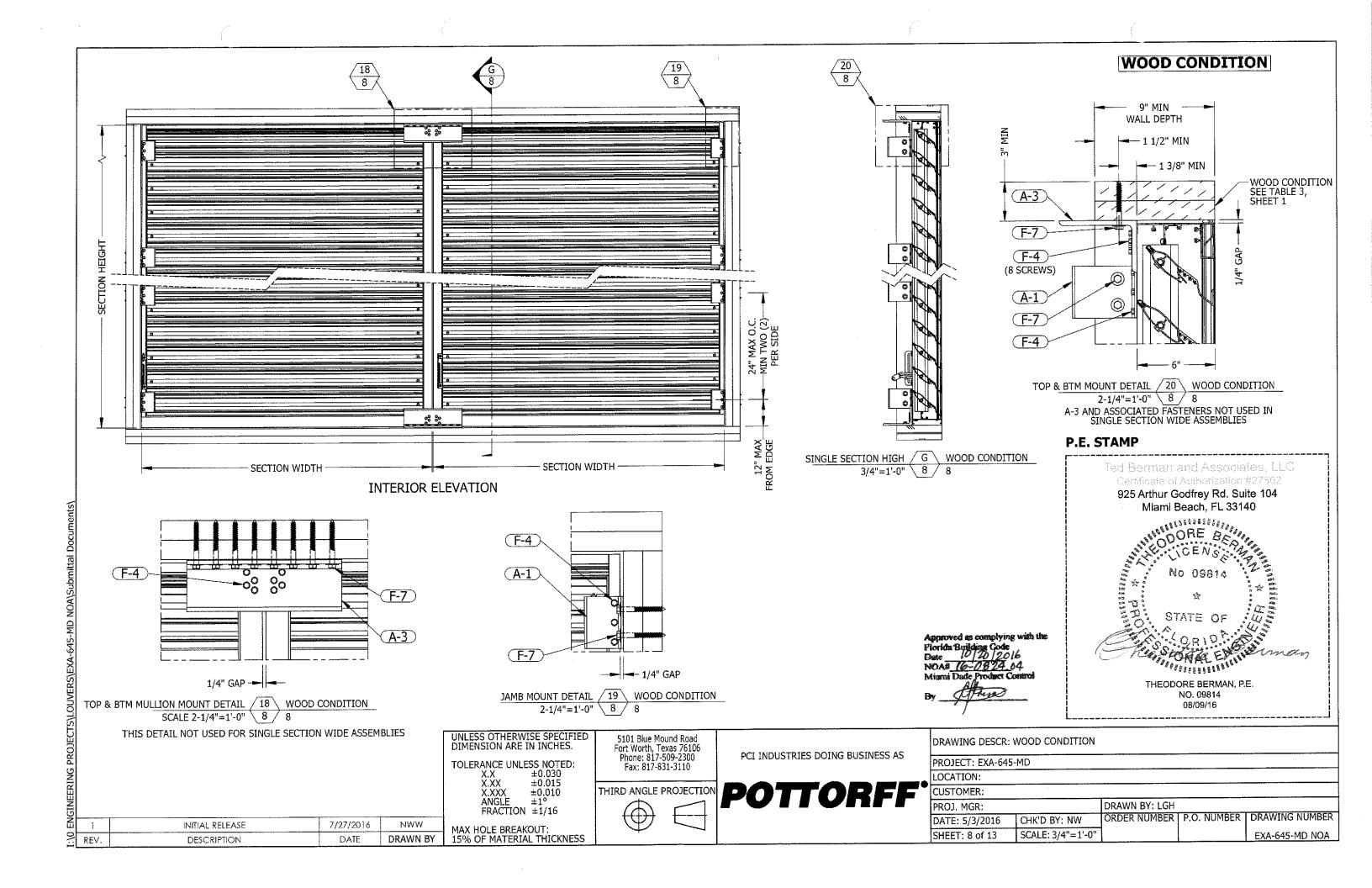
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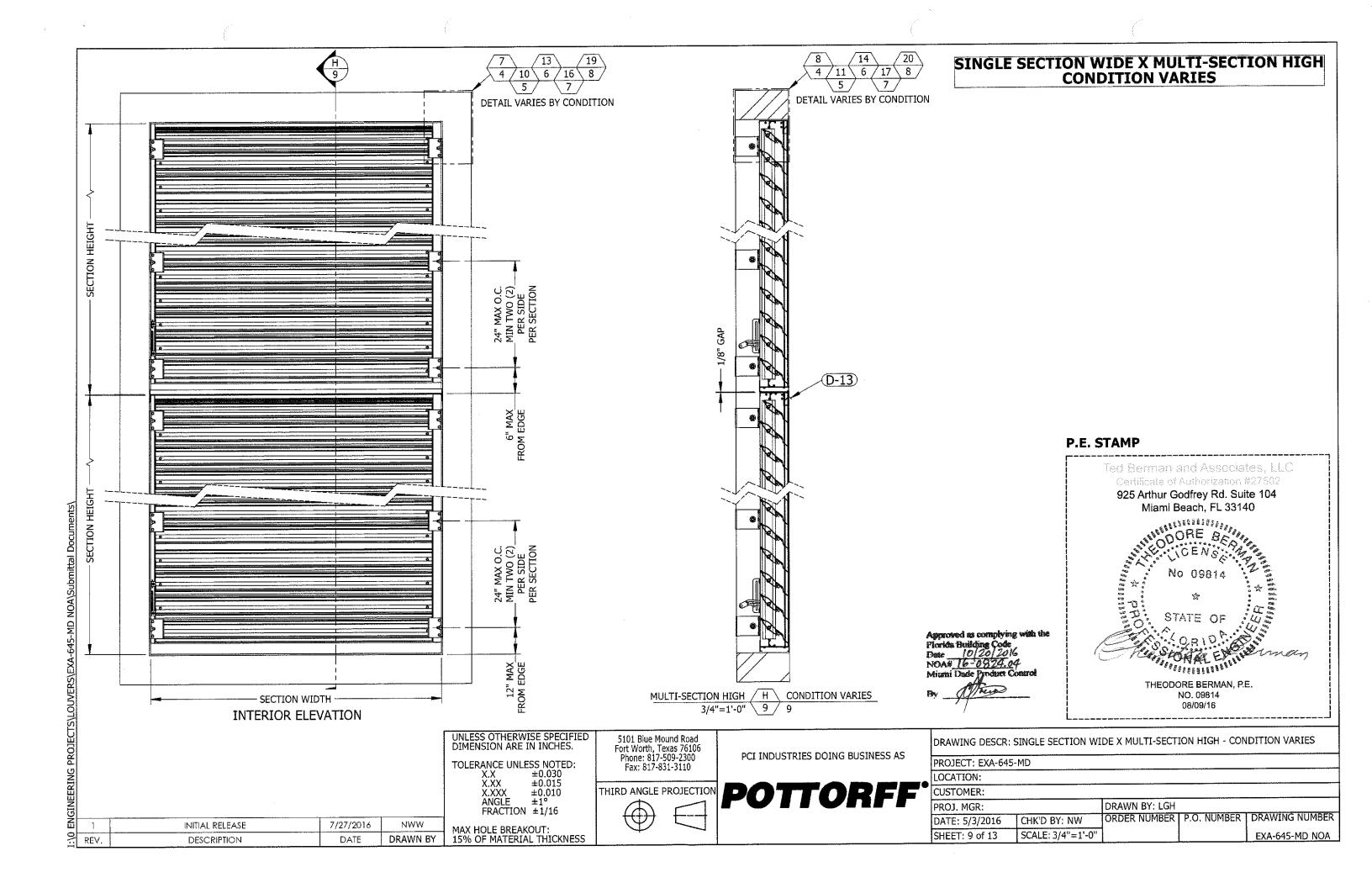


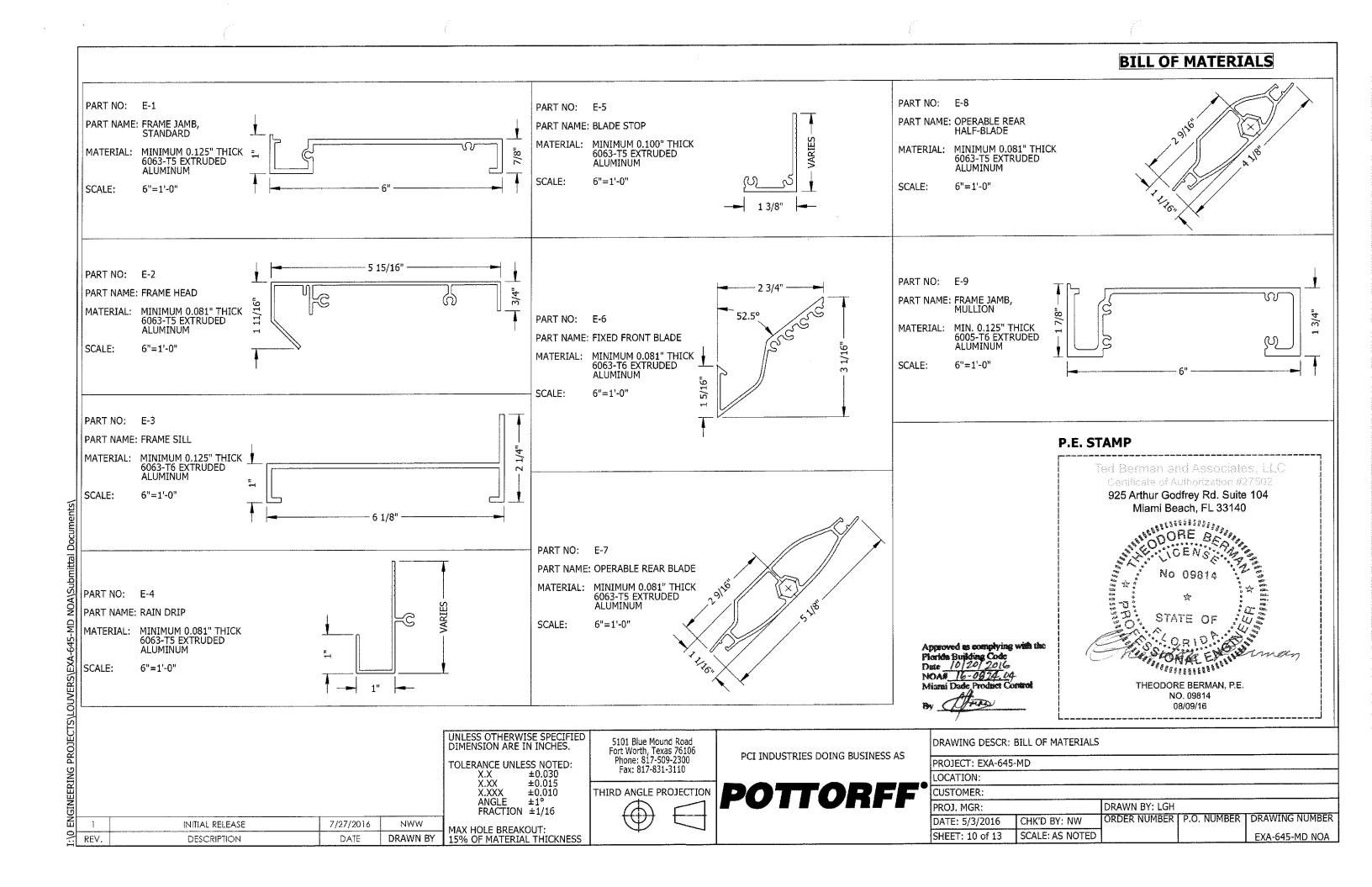


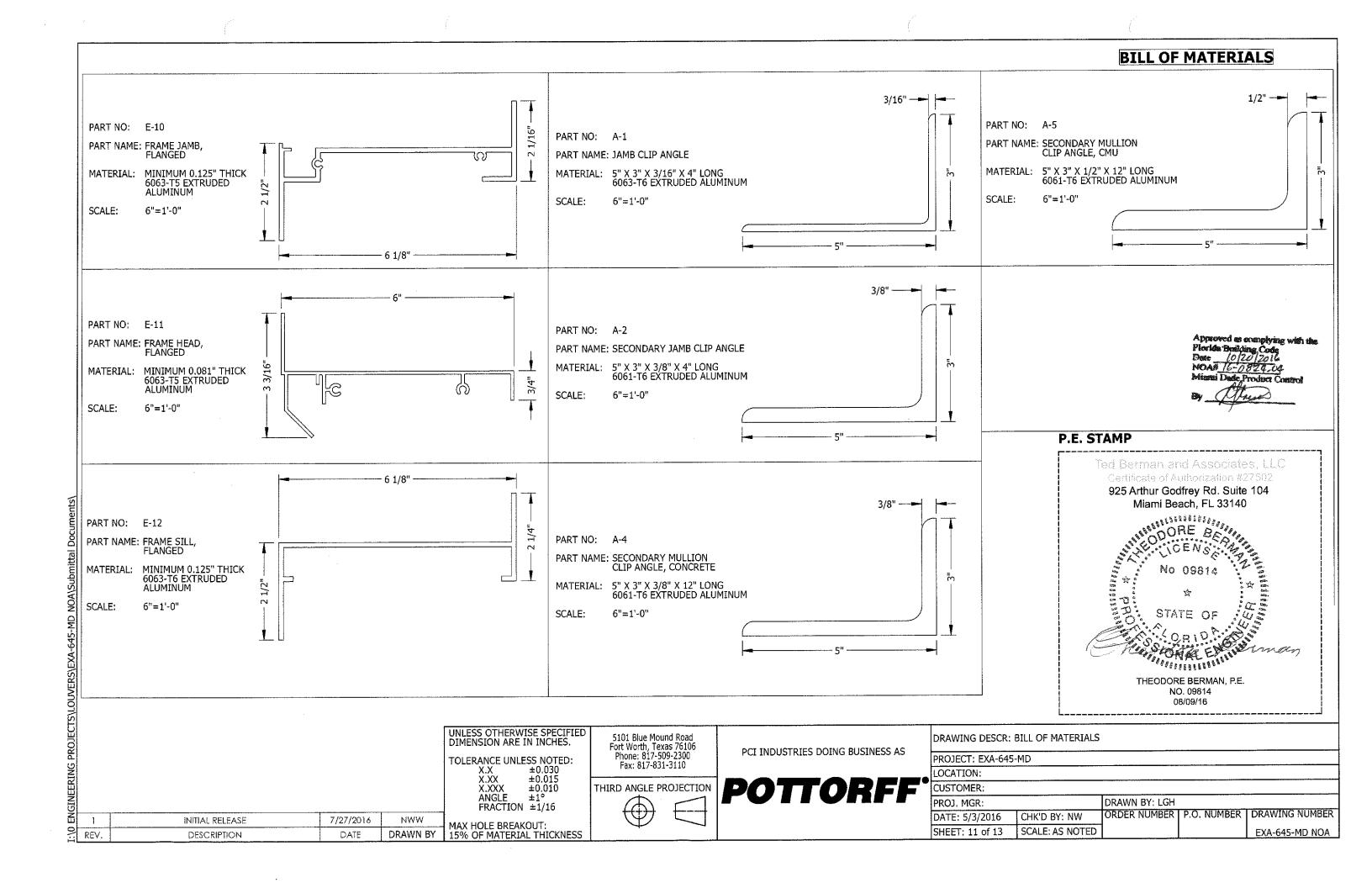












# **BILL OF MATERIALS** 5/8" -3/8" ---1 1/2" -8X Ø 1/4" THRU PART NO: A-3 PART NAME: MULLION CLIP ANGLE MATERIAL: 6" X 4" X 3/8" X 12" LONG 6061-T6 EXTRUDED ALUMINUM 6"=1'-0" SCALE: 3/8" ---PART NO: A-6 PART NAME: JAMB CLIP ANGLE, CMU P.E. STAMP MATERIAL: 5" X 3" X 3/8" X 4" LONG 6061-T6 EXTRUDED ALUMINUM fied Berman and Associates, LLC SCALE: 6"=1'-0" Certificate of Authorization #27502 925 Arthur Godfrey Rd. Suite 104 Miami Beach, FL 33140 ENGINEERING PROJECTS\LOUVERS\EXA-645-MD NOA\Submittal Documents\ SODORE BERMAN, PF NO. 09814 Approved as complying with the Plorida Building Code Date 10/20/2016 NOA#16-0824-04 Missei Dade Product Control

NOTE: ALL INSTALLATION FASTENERS AND ANCHORS SHALL BE OF CORROSION-RESISTANT STEEL (STAINLESS, HOT-DIP GALVANIZED, OR ZINC-PLATED)

UNLESS OTHERWISE SPECIFIED DIMENSION ARE IN INCHES. TOLERANCE UNLESS NOTED: X.X ±0.030 X.X X.XX ±0.015 X.XXX  $\pm 0.010$ ANGLE ±1°

THIRD ANGLE PROJECTION

5101 Blue Mound Road

Fort Worth, Texas 76106 Phone: 817-509-2300 Fax: 817-831-3110

PCI INDUSTRIES DOING BUSINESS AS

DRAWING DESCR: BILL OF MATERIALS

PROJECT: EXA-645-MD

LOCATION: CUSTOMER:

PROJ. MGR: DRAWN BY: LGH ORDER NUMBER | P.O. NUMBER | DRAWING NUMBER DATE: 5/3/2016 CHK'D BY: NW SHEET: 12 of 13 SCALE: AS NOTED EXA-645-MD NOA

08/09/16

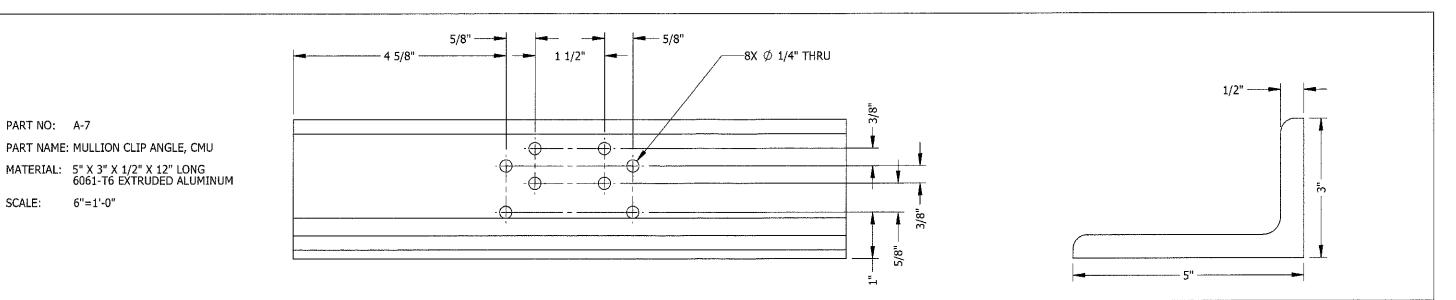
INITIAL RELEASE 7/27/2016 NWW DRAWN BY REV. DESCRIPTION DATE

FRACTION ±1/16 MAX HOLE BREAKOUT: 15% OF MATERIAL THICKNESS





# **BILL OF MATERIALS**



MISCELLANEOUS FASTENERS				
PART NO	DESCRIPTION			
F-1	#10-24 X 3/4" LONG, HWH, 410 S.S., "F" POINT MACHINE SCREW			
<b>F-</b> 2	BOLT, HEX HEAD, 1/4-20 UNC X 1/2" LONG, 18-8 S.S.			
F-3	#10-16 x 3" LONG, HWH, 410 S.S., SELF DRILLING TEK MACHINE SCREW			
F-4	1/4-14 X 1-1/2" LONG, HWH, 410 S.S., SELF-DRILLING TEK MACHINE SCREW			
F-5	1/2" X 5" HILTI KWIK-BOLT TZ, 304 S.S.			
F-6	1/2" X 5-1/2" HILTI KWIK HUS-EZ, ZINC-PLATED			
F-7	3/8" X 3-1/2" LAG BOLT W/FLAT WASHER			
F-8	1/4-20 X 1-1/4" LONG HEX BOLT, NUT, AND TWO (2) FLAT WASHERS, 300 SERIES SST OR EQUIVALENT			

MISC. DAMPER PARTS				
PART NO	DESCRIPTION	MATERIAL		
D-1	BUSHING, 1" OD X 1/2" ID X 5/16"	THERMOPLASTIC		
D-2	HEX AXLE	STEEL, ZINC PLATED		
D-3	SEAL, JAMB	304 SST		
D-4	PARALLEL CAM ASSEMBLY	STEEL, ZINC PLATED		
D-5	OPERABLE AIRFOIL BLADE SEAL	THERMOPLASTIC		
D-6	OPERABLE LOUVER STOP SEAL	THERMOPLASTIC		
D-7	BAR, LINK, 4.875" SPACING	STEEL, ZINC PLATED		
D-8	OPERABLE LOUVER HANDLE	GALVANIZED STEEL		
D-9	E-RING, 1/4"	ZINC PLATED STEEL		
D-10	E-RING, 1/2"	ZINC PLATED STEEL		
D-11	OPERABLE LOUVER BRACKET	GALVANIZED STEEL		
D-12	SCREW, 12-14 X 3/4, HWH, TEK	410 SST		
D-13	HEAD / SILL FLASHING	5052-H32		

Approved as complying with the Plorida Building Code
Date 10 20 20 20 NOA# 16-0024.04
Mismi Dade Product Control

P.E. STAMP



NOTE: ALL INSTALLATION FASTENERS AND ANCHORS SHALL BE OF CORROSION-RESISTANT STEEL (STAINLESS, HOT-DIP GALVANIZED, OR ZINC-PLATED)

 $\begin{array}{cc} \text{TOLERANCE UNLESS NOTED;} \\ \text{X,X} & \pm 0.030 \\ \text{X,XX} & \pm 0.015 \end{array}$ X.XXX ANGLE FRACTION ±1/16 NWW

5101 Blue Mound Road Fort Worth, Texas 76106 Phone: 817-509-2300 Fax: 817-831-3110

PCI INDUSTRIES DOING BUSINESS AS

# **POTTORFF**

RAWING	DESCR:	BILL	OF	MATERIALS	

F	ROJEC	T:	EXA-645-MD
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LOCATION:	
CHETOMED.	

SHEET: 13 of 13

PROJ. MGR:		DRAWN BY: LO
DATE: 5/3/2016	CHK'D BY: NW	ORDER NUMBE

SCALE: AS NOTED

RDFR NUMBFR I	P.O. NUMBER	DRAWING NUMBER
	1	
		EXA-645-MD NOA

INITIAL RELEASE 7/27/2016 REV. DESCRIPTION

DRAWN BY 15% OF MATERIAL THICKNESS

±0.010 ±1°

UNLESS OTHERWISE SPECIFIED DIMENSION ARE IN INCHES.

THIRD ANGLE PROJECTION